

Applicant: Yao Wang, *et al.*  
U.S.S.N.: 10/608,757  
Filing Date: 6/27/2003  
EMC Docket No.: EMC-01-141CIP2

### REMARKS

Applicants thank the Examiner for his careful consideration of the subject application.

Applicants have carefully considered the Office Action mailed May 28, 2009. Claims 1-17 were rejected and remain pending. Claims 1, 6, 10, and 14 have been amended in this response.

Claims 1-9 were rejected under 35 USC 101 and Claims 1-17 were rejected under 35 USC 103. Based on the amendments and arguments herein, Applicants respectfully request reconsideration, that the aforementioned rejections be withdrawn, and that the claims be placed in condition for allowance.

#### 35 USC 103

The Office Action rejected Claims 1-17 under 35 USC 103 as being unpatentable over Sicola et al (US Pre-Grant Publication 2004/0064639), hereinafter Sicola, in view of Mashayekhi et al. (US Patent 6,922,791) hereinafter Mashayekhi, in further view of Glenn II et al (Dec. 22, 1998), hereinafter Glenn. Applicants respectfully assert that Sicola in combination with Mashayekhi, in further combination with Glenn does not teach the claimed invention. However, to more clearly claim the current invention Applicants have amended independent Claims 1, 6, 10, and 14. Claims 1, 6, 10, and 14 are architecture, method, and system versions of the current invention. Applicants argument, in brief, is that none of the references disclose “the software agent designated to take over the data transfer operation executes scripts residing on the host to control host applications during replication in response to one or more data transfer commands when a failure of one or more of said software agents...”

Applicants assert that Sicola may not be used for a proper 35 USC 103 rejection in combination with Mashayekhi, in combination with Glenn, for Claims 1, 6, 10, or 14 as

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these references do not satisfy the tested enunciated in *Teleflex v. KSR*. In *Teleflex v. KSR*, the Supreme Court stated that a proper 35 USC 103 rejection requires the following steps be performed: (1) Determining the scope and content of the prior art; (2) Ascertaining the differences between the claimed invention and the prior art; and (3) Resolving the level of ordinary skill in the pertinent art. *Teleflex Inc. v. KSR Int'l Co.* 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007). This three part test has also been reemphasized and promulgated in the Federal Register. *Federal Register*, Vol. 72, No. 195.

Applying the KSR test to determine the scope and the content of the cited art, Applicants first address the scope of Sicola. Sicola states he discloses a “data replication system having a redundant configuration including dual Fibre Channel fabric links interconnecting each of the components of two data storage sites.” “[E]ach site comprises a host computer and associated data storage array, with redundant array controllers and adapters.” “In addition, association sets are employed by system to provide failure consistency by causing the group of logical units/volumes to all fail at the same time ensuring a point in time consistency on the remote site.”

Applying the second prong of KSR, Applicants now address the differences between the claimed invention and Sicola. Applicants assert that Sicola does not disclose, at least, “the software agent designated to take over the data transfer operation executes scripts residing on the host to control host applications during replication in response to one or more data transfer commands when a failure of one or more of said software agents.” Applicants note that the Office Action appears to agree with this assertion.

Applying the first prong of KSR to Mashayekhi, Applicants now address the scope of Mashayekhi. Mashayekhi, states he provides “a failover method and system . . . for a computer

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system having at least three nodes operating as a cluster.” (Mashayekhi abstract). Where that failover method “assign[s][ing] a failover node based on the determined weights of the surviving nodes.” (Mashayekhi abstract). This failover method includes “assigning applications running on the failed node to the failover node.” (Mashayekhi Col.4 l. 48-49) Mashayekhi states his invention proceeds by “detecting failure of one of the . . . nodes, determining a time of failure . . . assigning a failover node . . . assigning applications running on the failed node to the failover node. (Mashayekhi Col.4 l. 44-50) Mashayekhi therefore discloses assigning nodes given a failure.

Applying the second prong of KSR, Applicants now address the differences between the claimed invention and Mashayekhi. Applicants assert Mashayekhi does not rectify the deficiencies of Sicola and does not disclose, at least, “the software agent designated to take over the data transfer operation executes scripts residing on the host to control host applications during replication in response to one or more data transfer commands when a failure of one or more of said software agents.” Applicants note that the Office Action appears to agree with this assertion.

Applicants now apply the first prong of KSR to Glenn. Glenn states he “is directed towards a system and method for server back-up” Glenn further states his “system and method [is] for ‘n’ primary servers to fail over to ‘1’ secondary server. “‘Fail over’ is a phrase for when a primary computer relinquishes control of a network to a back-up computer.”

Applying the second prong of KSR to Glenn, Applicants respectfully assert that Glenn does not disclose “the software agent designated to take over the data transfer operation executes scripts residing on the host to control host applications during replication in response to one or

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more data transfer commands when a failure of one or more of said software agents.” In particular, Applicants assert that Glenn does not disclose “executing scripts on the host,” the scripts do not “control host applications,” and this is not “during replication.”

First, at the cited portion of Glenn asserted to correspond to the claimed feature it is stated that “the secondary server high availability module initiates a start script for each service to be failed over to the secondary server.” Glenn also states “a primary server to be shut-down executes a stop script for each service that the primary service is currently supporting.” However, Applicants find no reference to and assert that Glen does not disclose that the “the software agent designated to take over the data transfer operation” is “executing scripts on the host.” In Glenn the “primary server,” e.g. the failed server, “executes scripts.” Also, the “secondary server high availability module initiates scripts” but Glenn does not state where these scripts are resident. Applicants respectfully assert that Glenn suggests that secondary server’s scripts would be resident on the secondary server, not the primary server. This is because, in Glenn this occurs “during a failover,” which is defined within Glenn as “when a primary computer relinquishes control of a network to a back-up computer.” Applicants assert Glen would not continue control at the primary computer and the secondary server’s scripts would logically be resident at the secondary server.

Also, Applicants respectfully assert that Glenn does not disclose to “control host applications.” Rather, in Glenn, it is stated that the “primary server . . . executes a stop script” and “the secondary server . . . initiates a start script.” However, Applicants respectfully assert that Glenn’s “start script” and “stop script” are not to “control host applications” as is claimed.

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Finally, Applicants assert that Glenn does not disclose the “start script” and “stop script” occur “during replication.” In Glenn, the execution of the “stop script” and “start script” are during a failover operation. However, Applicants respectfully assert that this does not occur “during replication” as claimed

Addressing the third prong of KSR, Applicants further assert that one skilled in the relevant computer arts would not bridge the gap to arrive at the current invention. Therefore, Applicants respectfully assert that these references, in combination or in isolation, fail to satisfy the 35 USC 103 test as promulgated by the Supreme Court in KSR. As a result, Applicants assert that this 35 USC 103 rejection is improper and respectfully request it be withdrawn and Claims 1, 6, 10, and 14 be placed in condition for allowance. As Claims 2-5, 7-13 and 15-17 depend on Claims 1, 6, 10, and 14 and Claims 1, 6, 10, and 14 not are believed allowable, Claims 2-5, 7-13 and 15-17 should be allowable for at least the same reasons. Therefore, Applicants also respectfully request that the rejection of Claims 2-5, 7-13 and 15-17 be withdrawn and these claims be placed in condition for allowance.

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Conclusion

In view of the foregoing, Applicants believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-7450.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

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